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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,794	09/22/2003	Keiko Shiraishi	115031	7273
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OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER BLACKWELL, JAMES H	
			ART UNIT	PAPER NUMBER
			2176	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,794

Applicant(s)

SHIRAISHI ET AL.

Examiner

James H. Blackwell

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/21/07 has been entered.
2. The priority date is **09/20/2002**.
3. Claims 1-9, and 11-13 remain pending.
4. Claims 1-3, 9, and 11 are independent claims.

Claim Objections

5. Claim 4 is objected to because of the following informalities: The claim is in an improper form if it is to be understood as a dependent claim. The Examiner suggests the following change:

- line 1, delete preamble "A document processing system", and replace with first limitation (lines 2 and 3). Corrections to claims 5-8 should also be made to reflect suggested changes to Claim 4.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims ^{1-9 and 11-13}~~1-13~~ are rejected under 35 U.S.C. 102(b) as being anticipated by Salgado et al. (hereinafter Salgado, U.S. Patent No. 5,872,569 filed 10/30/1995, issued 02/16/1999).
DH

In regard to independent Claim 1, Salgado discloses:

- *A linking information making device* (Col. 7, line 51 through Col. 8, line 50; → a job ticket programming system (i.e., a system for creating a workflow) for use in a document processing system, executing on an application server, where a plurality of metaphor elements (i.e., icons representing the plurality of processing or storage devices) are used in a graphical user interface to assist the user in creating workflows for processing documents), *comprising*:

Note: service lists are interpreted to contain information on one or more individual devices, including functions they are capable of performing, as well as which of those functions are available (enabled), the status of the devices (e.g., hardware, out of paper, toner, etc.), and information on how to communicate, send, and receive information to/from the device. It is further assumed that each list can contain

information about a single device, or represents a collection of information from a plurality of devices.

- *a service list acquisition unit which acquires a service list expressing respective services which execute predetermined processing of document data, the respective services being provided by service processing devices* (Col. 14, lines 10-48; Fig. 7; → technique, implemented by an application server, for configuring a database with the various profiles of the devices disposed on the network (100). A capability/attribute set for an input/output/storage device is downloaded to the application server, where the capability of a device refers to each feature available for the device, whether that feature is enabled or not. An attribute of a device refers to an enabled feature currently available to a user. It is further noted that these sets can be periodically updated to reflect any changes in the capabilities/attributes of a given device, or if the device is even available (e.g., broken, offline, etc. (see Col. 16, lines 15-57)). Thus, Salgado provides a means to acquire and maintain service lists provided by service processing devices, as claimed.
- *an interface information acquisition unit which acquires pieces of interface information corresponding to the respective service processing devices* (Col. 14, lines 10-48; Fig. 7; Col. 16, lines 15-57 as argued above, and Col. 7, line 66 through Col. 8, line 50; → metaphors (icons visually depicting devices) are assigned to each of the devices available to the

document processing system. The assignment relates not only an icon to a device, but information (features/capabilities/interface) attributable to that device such that determinations can be made on compatibility of different devices via the metaphors. In order to determine compatibilities between devices (i.e., can the two devices communicate?) information as to interfaces would necessarily need to be known. Thus, Salgado provides a means to also collect interface information as evidenced by the ability of the system to make compatibility determinations between devices).

- *a linking information making unit which makes linking information based on the interface information which has been acquired by the information making unit, the linking information linking the respective services and being used by a service processing device having a function for starting a linking process that includes execution of the respective services* (Col. 7, line 66 through Col. 8, line 50; → at least devices that are found to be compatible with one another can be “linked” in the sense that output provided by a first device in a workflow is understood and accepted by a second device in a workflow. The workflow created and visually represented in a graphical user interface by the manipulation of metaphors. Salgado also describes the notion of “linking” with respect to “metaphorical combinations” which are understood to be visual representations of created workflows using metaphors. The links are visually represented by the user connecting on the screen the two devices

together with a line segment (see Fig. 11, starting at item 246; Figs. 12 and 13, Col. 9, figure captions for Figs. 12 and 13). Thus, Salgado discloses the ability to establish (make) links between devices in the process of building a workflow, either manually, or automatically (Col. 14, lines 10-21).

Regarding Claims 2 and 3, Claims 2 and 3 merely recite a method, and program on a recording medium operable on the device of Claim 1. Thus, Salgado discloses every limitation of Claims 2 and 3, as indicated in the above rejection of Claim 1.

In regard to dependent Claim 4, Salgado discloses:

Note: Claim 4 is interpreted as a dependent Claim, depending from Claim 1. In addition, a "search device" is interpreted as a component that at least "seeks" service devices and perhaps also polls those devices for information.

- *A document processing system, comprising:*
 - *the linking information making device according to claim 1 which acquires the service list transmitted from a search device (Col. 16, lines 15-41;→ networked devices can be queried (searched) directly, or, the application server can be registered with each device on the network to receive event related information to determine any changes to the device parameters and to update the database containing the parameters (e.g., services,*

capabilities, interface). The database acts as storage for the service list(s).

The service list(s) are stored to allow the "linking" device to determine and make "links" between devices as required by workflow construction).

- *a plurality of service processing devices which provide services for executing predetermined processing of document data and transmit pieces of service information at any time* (Figs. 12, 13; Col. 16, lines 15-41; → a plurality of document processing devices are shown in the figures as represented by their associated icons. Each device communicates its services to the application server continuously).
- *the search device provided with:*
 - *a service information storage unit for storing the pieces of service information which have been transmitted at any time from currently-available service processing devices* (Col. 16, lines 15-41; → a database for storing device parameters);
 - *a search unit for searching services corresponding to services, for which search has been requested, using the pieces of service information which have been stored in the service information storage unit* (Col. 16, lines 15-41; → networked devices can be queried (searched) directly, or, the application server can be registered with each device on the network to receive event related information to determine any changes to the device parameters and to update the database containing the parameters (e.g., services,

capabilities, interface). The database acts as storage for the service list(s). The service list(s) are stored to allow the "linking" device to determine and make "links" between devices as required by workflow construction. The application server acts as a search unit).

- *a transmission unit which transmits the service list based on the search results of the search unit (Col. 16, lines 15-41; → as argued above, the application server updates a database periodically based on polling/reporting of the devices on the network. Thus, it "transmits" those polling results to the database for subsequent use by the workflow being developed).*

In regard to dependent Claim 5, Salgado discloses:

- *the transmission unit of the search device transmit the service list ..., to the linking information making device (Col. 16, lines 15-41; → application server stores results of devices either being polled or reporting their information in a database for subsequent use by the workflow being developed, which in part establishes "linking" between devices).*

In regard to dependent Claim 6, Salgado discloses:

- *the service processing devices transmit pieces of input information and pieces of output information on services, service names, and service information location*

as service information (see Figs 14-16; Col. 16, lines 15-41;→ a service provider (e.g., device) contains input and output as well as accepting external information from the environment).

In regard to dependent Claim 7, Salgado discloses:

Note: the phrase “service information location” is interpreted to be an address that identifies a device (e.g., network address) or perhaps some location address within a device where a particular service is located (e.g., address in memory, on disk).

- *interface information acquisition unit of the linking information making device acquires pieces of service information location for accessing the respective service processing devices, from the search device, and acquires pieces of interface information from the service processing devices based on pieces of the acquired service information location* (Col. 16, lines 15-41;→ devices are either polled or are networked and communicate via application server to provide the system with information about the devices. Clearly, addressing, such as network addressing between the service devices and the application server would necessarily be required).

In regard to dependent Claim 8, Salgado discloses:

- *a service linking processing device which executes linking processing of services provided by the respective service processing devices, based on the linking information made by the linking information making device* (see Figs. 11-13; Col. 14, lines 10-48; Col. 16, lines 15-57 as argued above, and Col. 7, line 66 through Col. 8, line 50; → metaphors (icons visually depicting devices) are assigned to each of the devices available to the document processing system. The assignment relates not only an icon to a device, but information (features/capabilities/interface) attributable to that device such that determinations can be made on compatibility of different devices via the metaphors. In order to determine compatibilities between devices (i.e., can the two devices communicate?) information as to interfaces would necessarily need to be known. A successful compatibility determination (i.e., Device A is compatible with Device B) acts to establish “linking information” allowing the workflow designer to include these devices in a workflow and allow them to communicate. When the workflow is executed, the linking information is used to pass information from one device to another (see Figs. 12, 13).

In regard to independent Claim 9, Salgado discloses:

- *A linking information making device comprising:*
 - *an input device which inputs a service list expressing respective services which execute predetermined processing of document data, the respective services being provided by service processing devices (Col. 16, lines 15-41; → networked devices can be queried (searched) directly, or, the application server can be registered with each device on the network to receive event related information to determine any changes to the device parameters and to update the database containing the parameters (e.g., services, capabilities, interface). The database acts as storage for the service list(s). The service list(s) are stored to allow the "linking" device to determine and make "links" between devices as required by workflow construction. The applications server is seen to accept input from the devices and storing that input into a database).*
 - *a controller which*
 - *extracts pieces of port information of respective services from the service list input from the input device,*
 - *acquires pieces of interface information corresponding to the respective service processing devices based on the pieces of extracted port information (see Fig. 8; → mapping of metaphors to devices using information provided by the devices);*

- *makes linking information based on the pieces of acquired interface information, the linking information linking the respective services and being used by a service processing device having a function for starting a linking process that includes execution of the respective services* (Col. 7, line 66 through Col. 8, line 50; → at least devices that are found to be compatible with one another can be “linked” in the sense that output provided by a first device in a workflow is understood and accepted by a second device in a workflow. The workflow created and visually represented in a graphical user interface by the manipulation of metaphors. Salgado also describes the notion of “linking” with respect to “metaphorical combinations” which are understood to be visual representations of created workflows using metaphors. The links are visually represented by the user connecting on the screen the two devices together with a line segment (see Fig. 11, starting at item 246; Figs. 12 and 13, Col. 9, figure captions for Figs. 12 and 13). Thus, Salgado discloses the ability to establish (make) links between devices in the process of building a workflow, either manually, or automatically (Col. 14, lines 10-21).

In regard to independent Claim 11, Claim 11 reflects the linking information making device as previously disclosed in Claims 4, and 9, both of which are rejected by Salgado. Thus, Claim 11 is rejected along the same rationale as the rejections of Claim 4 and 9, respectively.

In regard to dependent Claim 12, Salgado discloses:

- *the service processing devices transmit at least pieces of port information of services and service outlines as the service information* (see Col. 16, lines 15-41 and previous arguments above; → service devices are polled or transmit their information to the application server which stores that information in a database which is updated. Fig. 16 lists possible attributes including those likely corresponding to port (e.g., service location)).

In regard to dependent Claim 13, Salgado discloses:

- *a service linking processing device which executes linking processing of services provided by the respective service processing devices, based on the linking information made by the linking information making device* (see Figs. 11-13; Col. 14, lines 10-48; Col. 16, lines 15-57 as argued above, and Col. 7, line 66 through Col. 8, line 50; → metaphors (icons visually depicting devices) are assigned to each of the devices available to the document processing system. The assignment relates not only an icon to a device, but information (features/capabilities/interface) attributable to that device such that

determinations can be made on compatibility of different devices via the metaphors. In order to determine compatibilities between devices (i.e., can the two devices communicate?) information as to interfaces would necessarily need to be known. A successful compatibility determination (i.e., Device A is compatible with Device B) acts to establish "linking information" allowing the workflow designer to include these devices in a workflow and allow them to communicate. When the workflow is executed, the linking information is used to pass information from one device to another (see Figs. 12, 13).

Response to Arguments

8. Applicants argue that the prior art of Salgado fails to disclose a linking information making device including at least linking information that links respective services and is used by a service processing device having a function for starting a link process that includes execution of the respective services, recited in independent Claims 1-3, 9, and 11, as amended.

9. It is noted that a personal interview with the Applicant's representative was held April 19, 2007. During that interview, Applicant's representative characterized the "linking" disclosed by Salgado "was not the same as the linking described in the instant claims, as amended". Though not expressed in the Examiner's Interview Summary, the Examiner seems to recall that the Applicant's representative generally described their invention, as disclosed in the instant claims, as amended, as "not being directed to a device, method, system for creating a workflow, but rather to starting with an existing workflow and executing it". The Examiner speculates that said existing workflow performs the claimed steps as part of the workflow itself? The Examiner notes that the Specification (and Drawings) both strongly suggest creation of a workflow, and the claims were rejected based on a possible interpretation of, and in light of the Specification. The Examiner would request clarification if necessary on this issue.

10. Since the amended claims, remarks provided with this amendment, and the personal interview in the Examiner's opinion, fail to shed further light on how or why the prior art of Salgado fails to disclose Applicant's invention, the application of the prior art of Salgado will continue. However, in order to further prosecution of the application, the Examiner will provide a revised rejection providing further elaboration on how the Salgado art discloses Applicant's invention.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Blackwell whose telephone number is 571-272-4089. The examiner can normally be reached on Mon-Fri.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James H. Blackwell
04/27/2007


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